



**ABOVE** • Several tulip poplar trees in front of Bldg. 31 had to come down recently. See story on p. 16.

## features

1  
**Time Running Out for 2,300 on Badge Compliance**

3  
**Nuland To Give First Straus Lecture**

5  
**NIH Earns 'Beyond Green' Award**

16  
**Snags Pose Risk, Are Felled**

## departments

Briefs	2
Feedback	10
Milestones	11
Digest	14
Volunteers	15
Seen	16

# nih record

## Some 2,300 NIH'ers May Lose Access to Workplace

By Rich McManus

While most of the people who work at NIH have complied with the process of obtaining new ID badges, which have required background or "suitability" checks, there remains a cohort of roughly 2,300 individuals who have not yet jumped all the hurdles. In the not too distant future, these folks may face a three-strikes situation before they will find their cards disabled, said Richie Taffet, acting director of the Division of Personnel Security and Access Control.

The announcement that there was such a large population of noncompliant workers came at the December meeting of CABS, the community advisory board for security, which has met in the wake of 9/11 to manage community concerns about dramatic increases in security requirements at NIH.

CABS members want to be sure no badges are disabled, however, until NIH does all it can to assure that the badge-acquisition process is user-friendly and easily understandable.

As 2008 wound to a close, some 3,000 people were believed to have failed to meet

SEE **NO BADGE**, PAGE 8



Latoya Headley (seated) and mom Darlene

*'This Thing Called Hope'*

### Patient Designs T-Shirt to Inspire Others

By Belle Waring

Latoya Headley, a month shy of her 23rd birthday, and with no history of ill health, woke up one morning to find that she could not walk.

"She was paralyzed from the waist down," recalls her mother, Darlene Headley-Johnson. As she rushed her daughter to the ER at Inova

SEE **T-SHIRT** PAGE 4



Dr. Joel Scholten

### Forum Explores Post Traumatic Stress

By Belle Waring

A recent Staff Training in Extramural Programs (STEP) forum in Natcher Bldg. explored "Post Traumatic Stress Disorder: What Are the Facts?"

A devastating anxiety disorder, PTSD can occur after experiencing or witnessing combat, abuse and assault, terrorist attacks, accidents or natural disasters.

"Post traumatic stress disorder patients are 6 times more likely to attempt suicide than the general population," said Dr. Terence Keane of the behavioral science division at the National Center for PTSD.

PTSD affects millions of Americans every year. Symptoms include nightmares and flashbacks, emotional numbing, avoidance and agitation.

Keane presented diagnostic tools and outlined risk factors such as event severity, poor social support, adverse childhood events, gender (women being at higher risk) and low socioeconomic status.

SEE **PTSD**, PAGE 6



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## briefs

### STEP Forum on Circadian Rhythm

The staff training in extramural programs (STEP) committee will present a Science for All forum on the topic "I've Got Rhythm, Circadian Rhythm!" on Thursday, Mar. 5, from 8:30 a.m. to 12:30 p.m. in Lister Hill Auditorium, Bldg. 38A.

Circadian (about a day) rhythms affect your behavior and nearly every physiological process. Variations of circadian rhythms are associated with heart disease, obesity, depression and the efficacy of chemotherapy. They also affect our ability to adjust to night shift work and daylight savings time. Come to this STEP forum to learn more about circadian rhythms—what they are, what aspects of human health and disease they control and what animal and human studies have taught us. You'll learn how we synchronize our rhythms to the day-and-night cycles in our environment, the differences and similarities among larks and night owls, how circadian rhythms affect bodily functions and how we might rely on circadian rhythms for future research in prevention and treatment.

### Sailing Association Open House, Mar. 12

The NIH Sailing Association invites everyone to its open house on Thursday, Mar. 12 from 5 to 8 p.m. at the FAES House at the corner of Old Georgetown Rd. and Cedar Ln. Would you like to learn to sail? Can you imagine being part of a group of skilled sailing instructors, enthusiasts and boat owners? The club offers instruction, sailboats for charter, racing, cruises, parties and fun. Open house is \$5 at the door and includes pizza and sodas; cash bar for beer and wine, \$1 each. Look for NIHSA posters and flyers around campus. For more information, visit [www.recgov.org/sail](http://www.recgov.org/sail).

### FARE 2010 Invites Applicants

The 16th annual Fellows Award for Research Excellence (FARE) 2010 competition will again provide recognition for outstanding scientific research performed by intramural NIH postdoctoral fellows. FARE winners receive a \$1,000 travel award to present their work at a scientific meeting. Twenty five percent of the fellows who apply will win an award.

FARE applicants must submit an abstract of their research, which will be evaluated anonymously on scientific merit, experimental design and overall quality/presentation. FARE winners are expected to present their work at the FARE 2010 awards ceremony and to serve as judges for the FARE 2011 competition.

The FARE 2010 competition is open to any NIH postdoctoral fellow with fewer than 5 years postdoctoral experience in the NIH intramural research program. Pre-IRTAs performing doctoral dissertation research at NIH are also eligible. Visiting fellows/scientists must not have been tenured at their home institute. Questions about eligibility should be addressed to your institute's scientific director.

Applications, including abstracts, will be accepted from Feb. 23 through Mar. 25 at <http://felcom.od.nih.gov/subcommittee/fare.aspx>. Winners will be announced by Aug. 15 and the travel award must be used between Oct. 1, 2009, and Sept. 30, 2010.

More information is available at the web site above. Contact a Felcom representative from your institute if you have more questions (<http://felcom.od.nih.gov/members.aspx>).

### Night at Circus Benefits NIH Charities

Ringling Bros. and Barnum & Bailey and the R&W invite children of all ages to the 138th edition of The Greatest Show on Earth. The 12th annual Children's Premiere Night hosted by R&W and benefiting the NIH Charities will be held on Wednesday, Mar. 18 at 7 p.m. with a free pre-show at 6. The event is a fundraiser and provides an evening of entertainment to many special-needs children in the area. Over the years, R&W has treated more than 25,000 children to the circus. The goal this year is to fill the Verizon Center with friends and family. Tickets are on sale at the R&W activities desk in Bldg. 31, Rm. B1W30 or by calling (301) 496-4600. Orders can be placed for tickets at any R&W store. Tickets include Circus Celebrity—front row/interactive seating where you become part of the show \$70 (reg. \$95), \$45 (front row - reg. \$65), \$35 (first 5 rows - reg. \$50), and \$20 (sections 111 & 112 - reg. \$28).

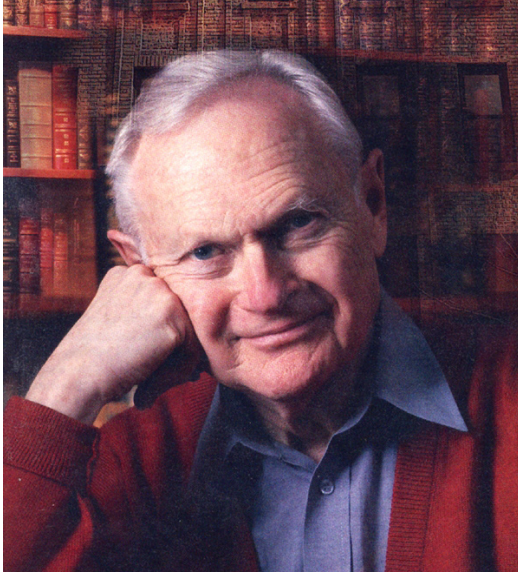
### New Ways of Promoting NIH Jobs

The Office of Human Resources has two new ways to recruit new employees to NIH. The first targets dual-career families that are job hunting at the same time. NIH is a founding member of the newly launched Mid-Atlantic Higher Education Recruitment Consortium (MA-HERC). NIH positions are highlighted on the MA-HERC job board allowing the agency to attract applicants who have family members applying for jobs at one of the other 19 member institutions. For more information on MA-HERC, visit [www.midatlanticherc.org](http://www.midatlanticherc.org).

OHR has also launched a job search engine on the Jobs at NIH web site ([www.jobs.nih.gov](http://www.jobs.nih.gov)). Most jobs at NIH are advertised on USAJOBS, but there are some, in particular scientific and research jobs, that are only advertised in scientific journals, on IC web sites or through the Research and Training Opportunities web site. Because of this, scientists looking for NIH jobs had to go to multiple locations to see all of the positions available here. With the new search engine, job seekers will be able to find most NIH positions in one search.

# nih record





Dr. Sherwin B. Nuland of Yale University

## Nuland To Give First Straus Lecture

On Tuesday, Mar. 10, the National Center for Complementary and Alternative Medicine will hold the inaugural Stephen E. Straus Distinguished Lecture in the Science of Complementary and Alternative Medicine. Dr. Sherwin B. Nuland, author and clinical professor of surgery at Yale University, will speak on "Chinese Medicine, Western Science, and Acupuncture."

Nuland has written numerous books including *How We Die*, which won the National Book Award. During visits to China, he observed major surgery being done with no anesthesia, aided by acupuncture. In this lecture, he will describe these operations and tell of his experience. In his recent book *The Uncertain Art: Thoughts on a Life in Medicine*, Nuland writes "...the basis of acupuncture's practical usefulness, even in the operating room, has still not been explained in terms acceptable to most orthodox Western scientists using orthodox Western investigative methods."

The lecture series was established in honor of Dr. Stephen E. Straus, founding director of NCCAM and an internationally recognized clinician-scientist, who died in 2007. "Steve created a legacy we are continuing to build upon," said NCCAM director Dr. Josephine Briggs. "He advocated for the most rigorous scientific methods to study complementary and alternative medicine. A lecture series in his name is only fitting to honor the work of such a brilliant and extraordinary scientist."

This event is one of several activities that will be held throughout 2009 to mark NCCAM's 10th anniversary. It is supported by the Foundation for the National Institutes of Health and the Bernard Osher Foundation. The lecture begins at 2:30 p.m. in Masur Auditorium, Bldg. 10, and is followed by a poster session and reception in the southeast patio. All are invited to attend. It will also be videocast on <http://videocast.nih.gov>.

## Americans Continue To Use Complementary, Alternative Medicine

Complementary and alternative medicine (CAM) use remains popular among Americans. Approximately 38 percent of adults in the United States and nearly 12 percent of U.S. children use some form of CAM, according to a new nationwide survey. CAM is a group of diverse medical and health care systems, practices and products that are not generally considered to be part of conventional medicine. It includes herbal supplements, meditation, chiropractic or osteopathic manipulation and acupuncture.

The survey, conducted as part of the 2007 National Health Interview Survey, was developed by the National Center for Complementary and Alternative Medicine and the National Center for Health Statistics, a part of the CDC.

"The 2007 NHIS provides the most current, comprehensive and reliable source of information on Americans' use of CAM," said Dr. Josephine Briggs, NCCAM director. "These statistics confirm that CAM practices are a frequently used component of Americans' health care regimens and reinforce the need for rigorous research to study the safety and effectiveness of these therapies. The data also point out the need for patients and health care providers to openly discuss CAM use to ensure safe and coordinated care."

Comparison of the data from the 2002 and 2007 surveys suggests that overall use of CAM among adults in the past 12 months has remained relatively steady—36 percent in 2002 and 38 percent in 2007. However, there has been variation in the use of some specific CAM therapies, for example, deep breathing, meditation, massage therapy and yoga all showed significant increases.

Adults used CAM most often to treat pain including back pain or problems, neck pain or problems, joint pain or stiffness/other joint condition, arthritis and other musculoskeletal conditions.

Overall, CAM use among children is nearly 12 percent. Children are five times more likely to use CAM if a parent or other relative uses it. Among children, CAM therapies were used most often for back or neck pain, head or chest colds, anxiety or stress, other musculoskeletal problems and attention deficit/hyperactivity disorder. The survey also shows that children use a variety of natural products.

## International Art Exhibit in NIH Visitors Center

"The day I will never forget..." an international art exchange exhibit, is on display in the Nobel Laureate Exhibit Hall at the NIH Visitors Center in Bldg. 45 through the end of April. This collaborative effort, sponsored by Tracy's Kids Pediatric Art Therapy Program, NCI

and the Middle East Cancer Consortium (MECC), contains works of art created by pediatric hematology-oncology patients and family members at hospitals and clinics in the U.S., Egypt, Israel, Jordan and Turkey. Tracy's Kids is a non-profit organization affiliated with Georgetown University Medical Center's Lombardi Comprehensive Cancer Center. MECC began in 1996 with NCI assistance and has as its members Cyprus, Egypt, Israel, Jordan, the Palestinian Authority and Turkey. The Visitors Center is open Monday through Friday from 8:30 a.m. to 4:30 p.m. and is located in the lobby of the Natcher Bldg.



This drawing is by Nazan Songural, a 13-year-old osteosarcoma patient at a hospital in Ankara, Turkey.

## T-SHIRT

CONTINUED FROM PAGE 1



*Headley-Johnson shows the back of her daughter Latoya's T-shirt design.*

Fairfax Hospital, "We had to hold her like a baby."

"It came out of nowhere," Latoya says.

An MRI revealed a swelling in the spinal cord. Something was blocking the signals that tell the legs to move. "I never imagined," she says, "that there would be a tumor in my spine."

Diagnosis: glioblastoma multiforme (GBM), an aggressive cancer. The neurosurgeon removed as much as he could. The day after her 23rd birthday, Latoya started chemotherapy and radiation. But the tumor came back.

"I got scared when they said, 'Latoya cannot do another surgery,'" says Headley-Johnson. "I thought, 'What can we do, where can we go?'"

She didn't give up. When a coworker suggested a clinical trial, she got on the computer, found the trials at NIH and called Latoya's primary care physician.

Her timing was perfect.

"I was feeling hopeless," Headley-Johnson continues, "but the doctor said, 'Can you go to NIH on Monday?' She referred Latoya in."

That was how, in January 2008, Latoya began participating in a phase I clinical trial for recurring GBM tumors.

"The trial," explains Dr. Howard Fine, Neuro-Oncology Branch chief and NCI senior investigator, "is testing a new drug, Enzastaurin, developed as anti-angiogenesis."

Angiogenesis is the body's process of making new blood vessels. "Tumors learn to make chemicals to induce new blood vessel growth," says Fine. "Enzastaurin works by targeting the blood vessels that feed the tumors. The drug turns off the angiogenesis and starves them out."

The trial combines the new drug with another form of chemotherapy, to see if the two together will be more effective.

The gliomas, says Fine, occur most commonly in the brain, but occasionally in the spine, where they can cause severe disability, similar to a spinal cord injury, but progressive. This means that the disease advances from bad to worse.

"When Latoya was first diagnosed," he recalls, "she came to us after her tumor had recurred. Most patients in this situation have a very short life expectancy. And here she is a year later..."

"There's this thing called hope," he continues, "if nothing else, for quality of life."

Latoya is followed up every month, when "they thoroughly check everything," she says, "give you a report card, go over any good outcomes. They take the time."

Her mom says, "They're protecting the patient. It's not just a focus on getting somebody in here and being an experiment. They give you a choice." In the CC, "the services are great. It's so comforting here."

As for the new drug, Latoya says, "I've never had bad side effects, and my hair is still growing... Enzastaurin is for brain tumors. They were excited to know it's working in the spine."

She's been "off her legs" for over a year, but now she can stand free of her physical therapy (PT) walker long enough to clap her hands.

"A good response to treatment," says nurse-practitioner Irene Stroud.

Before she got sick, Latoya, one of five siblings, was already out on her own. She had completed a few semesters of college when her father was tragically killed in an auto accident. After that, she left school to work as an administrative assistant. She now shares an apartment with her younger sister.

"I have some independence," Latoya says. And creativity, too.

"I believe in a higher power," she says. "Along this journey, I came across a scripture on salvation and healing and the Greek word *sozo* [literally, 'rescue' or 'save'] translates that. It's something my heart desired throughout this process. So I decided to design a T-shirt for encouragement and awareness."

Her mom, a freelance graphic artist, encouraged her to draw when she was little. Latoya now uses Internet templates, but the overall design idea is hers. "At PT," she says, "people who had an accident have to learn how to talk. So I would pity-pot some days. I couldn't walk, but they couldn't talk! It would make me appreciate what I had."

Her T-shirt reads SOZO; in back, it shows a spinal column with a band-aid.

"I really mean everything I say; I've experienced a lot," says Latoya, who turned 24 last October. "Even if you don't have a tumor, you can't have poor spirits when you're fighting something. I've heard people's struggles and their stories. They've encouraged me. Now I want to encourage everybody else."

For T-shirt inquiries, email [sozoclothing@gmail.com](mailto:sozoclothing@gmail.com) or visit the Bldg. 10 or Bldg. 31 R&W gift shops, which stock it. ?





### Building Deconstruction Earns NIH 'Beyond Green' Award

If you take care in crunching up old lab buildings, as NIH did with Bldg. 37 a year or so ago, you can get rewarded for it.


NIH's Office of Research Facilities (ORF) was awarded the 2008 "Beyond Green" High-Performance Building Award by the Sustainable Buildings Industry Council for its careful "deconstruction" of Bldg. 37. In award-speak, the honor recognizes "work in integrating cost-effective methods to remove hazardous waste from other debris in laboratory renovation and demolition activities."

Like many research and educational institutions, NIH has a large inventory of aging, obsolete laboratory facilities that now must be upgraded or replaced to meet new requirements. ORF regards its process for identifying, removing, separating and minimizing hazardous waste during renovation and deconstruction as necessary to meet new mandates for increased recycling of demolition debris. It is also good business practice to reduce environmental impacts.

The process also helps protect demolition workers and ensures that contaminants and hazardous materials such as asbestos and lead are eliminated or reduced to levels acceptable for the next use of a building, said ORF's Ed Rau.

ORF's procedures have been widely disseminated and are currently being adopted by several universities and government agencies including the Environmental Protection Agency. They have also been included in new national standards for laboratory decommissioning published by the American Industrial Hygiene Association and the American National Standards Institute.

NIH will be honored at a reception on Capitol Hill on Feb. 26 in conjunction with an educational briefing for lawmakers and the public.

The Sustainable Buildings Industry Council is an independent, non-profit trade association in Washington, D.C., that seeks to improve the long-term performance and value of buildings through outreach, advocacy and education programs. 



#### **Above:**

*Bldg. 37 is shown at left in its "before" stage of debris removal. The photo at right shows the site after careful deconstruction took place. The job won a "Beyond Green" award.*

### Orioles and Nationals Ticket Sale

Baseball season is just around the corner and R&W will once again be offering tickets to the Baltimore Orioles and Washington Nationals. Orioles' tickets will go on sale Tuesday, Feb. 24 in Bldg. 31, Rm. B1W30 (outside the R&W Gift Shop) at 8 a.m. Available tickets will include two regular season tickets (2 seats behind first base – section 14BBB, seats 7-8) \$35 (reg. \$40) - Yankees & Red Sox games \$45 (reg. \$55) and 13 Sunday games (4 seats behind third base – section 58MM) \$45 (reg. \$50) - Yankees & Red Sox games \$55 (reg. \$70). You may buy one set of tickets the first time through the line. After the initial line ends you may come back through to purchase additional tickets.

Nationals' tickets will go on sale Thursday, Feb. 26 at 8 a.m. R&W has 4 seats in section 219, row D. Tickets are \$47.50 each – games vs. the Boston Red Sox (6/23-6/25) are \$55 (reg. \$60). All remaining tickets not sold in the morning will be available to purchase through any R&W store. You must be a 2009 R&W member to buy tickets. Membership is \$7.

### Baseball Opening Day Auctions

The R&W will hold a silent auction via email for the Baltimore Orioles 2009 home opener vs. the New York Yankees. R&W has two tickets in section 14BBB. The opening bid for the pair will be \$110 (\$55 per ticket) and bidding will be done in increments of \$5. The email auction will begin Tuesday, Mar. 3 at 8 a.m. and end Thursday, Mar. 5 at 3:30 p.m.

There will also be a silent auction via email for the Washington Nationals 2009 home opener vs. the world champion Philadelphia Phillies. R&W has 4 tickets in section 219, row D that will be sold as sets of two. The opening bid for each pair will be face value, \$120 (\$60 per ticket) and bidding will be done in increments of \$5. The email auction will begin Tuesday, Mar. 10 at 8 a.m. and end Thursday, Mar. 12 at 3:30 p.m. If you are interested in participating in the auctions, email nihrw@mail.nih.gov and note which one(s).



## PTSD

CONTINUED FROM PAGE 1

**Above:**  
PTSD panelists include (from l) Dr. Lisa Jaycox, Dr. Dean Kilpatrick, Dr. Dennis Charney and Dr. Terry Keane.

PHOTOS: MICHAEL SPENCER

PTSD has a number of comorbidities (diseases that occur along with it) and it's important to tease these apart. Keane explained how alcoholism or depression, for example, might precede PTSD, accompany onset or follow it.

Focusing on military PTSD, major depression and traumatic brain injury (TBI), Dr. Lisa Jaycox of the Rand Corp. cited nearly 20 percent of service members and veterans who have returned from Operations Iraqi Freedom and Enduring Freedom as having "a current mental health condition."

In this otherwise healthy young cohort, "exposure to combat trauma is the best predictor for both PTSD and depression," she said.

PTSD can cause long-term damage to a veteran's health, career and relationships. Yet while we know more than ever about treatment, 47 percent of veterans with PTSD or depression did not seek care; of those who did, half did not receive even "minimally adequate" services.

In addition, 57 percent of those reporting a probable TBI while deployed say they were never evaluated by a doctor for a brain injury.

Gaps in access and quality of care are "substantial." These issues, said Jaycox, go beyond Department of Defense and Veterans Administration health systems. She called for more research, more effective care and more care providers.

"It's a pipeline issue," she said.

Reviewing PTSD among civilians, Dr. Dean Kilpatrick of the Medical University of South Carolina explained "why we should care."

Not only are civilians the vast majority of the U.S. population, but also civilians of all ages, including children, experience events that can cause PTSD.

"Exposure to violence among adolescents and young adults is not rare," he said. "What is rare

is finding someone who has only been exposed to one type of event."

The more one is exposed, the greater the likelihood one will have other disorders such as depression, substance abuse and delinquency.

"You watch them 7 years later, and 1 out of 5 have been revictimized," he said.

The initial injury "impairs their ability to size up danger," he continued. "It's an independent risk factor."

In studies of American prisoners of war in North Vietnam, Mt. Sinai Medical Center's Dr. Dennis Charney offered moving portraits of human resilience.

A more recent study of Special Forces candidates showed neurochemical response patterns to acute stress. In the junctions, or synapses, between nerve endings were genetic variations that influenced neurotransmitters—chemicals in our bodies that affect mood and ability to cope.

"We're going to develop a list of genes that add to vulnerability on one hand," he said, "and resilience, on the other, to extreme stress."

He also offered "the resilience prescription," which included optimism, "cognitive reappraisal" and a supportive social network.

What of clinical implications for TBI and PTSD?

Dr. Joel Scholten of the VA showed that while most of the TBIs in the U.S. are caused by falls, accidents and assaults, the most common cause in active duty personnel is blasts.

There are 1.4 million TBIs in the U.S. per year. Around 85-90 percent are mild, but mild doesn't mean harmless.

A TBI can result in problems with cognition, behavior and emotion. Patients may also suffer from physical problems such as chronic headache, dizziness and blurred vision.

The overall frequency of symptoms is greater with blast than, say, car accident.

"There's something about the blast," Scholten said.



Moreover, “the most common symptoms of mild TBI and PTSD are identical,” he said.

PTSD and TBI can co-exist, even in the absence of a memory of the event. This makes evaluation “very, very challenging, because you rely on the patient’s self-reported history, and it may be 5 years after deployment,” Scholten added.

Treatment includes medication and cognitive behavioral therapy. But much still needs to be done.

For example, “no medications are specifically FDA-approved for either TBI or PTSD sleep disturbance,” Scholten said, calling for an interdisciplinary, team approach.

“[Patients] just want to be young and healthy and back to normal,” he said. “We need to find one clinical entity—for example, headache—to draw them in and get them involved in their care.” 🗨

### Stadtman Symposium Set, Apr. 29

“The Stadtman Symposium—A Gathering to Honor Earl” will be held Apr. 29 at the Bethesda North Marriott Hotel & Conference Center. Stadtman will be remembered for his contributions to the scientific program of the National Heart, Lung, and Blood Institute. The symposium will be based on the “Stadtman tradition” with emphasis on science and also bring his trainees together to pay tribute to him. Speakers include two Nobel laureates, Drs. Michael S. Brown and Stanley B. Prusiner; the former CEO of Merck, Dr. P. Roy Vagelos; and Dr. Elizabeth Nabel, NHLBI director.



Stadtman was among the best-known researchers at NIH and a pioneer in the study of fatty acids, amino acids and free radical production. During his 50-plus-year career at NIH, he represented the best the intramural program has to offer: an unwavering dedication to research as well as to the training of others, which included two Nobel Prize winners, 10 members of the National Academy of Sciences and several leaders of industry. His own long list of awards includes the National Medal of Science, the highest honor that can be given a scientist in the United States.



### NIEHS's Wilson To Focus on Research Full Time

Dr. Samuel H. Wilson, the long-time deputy director and recent acting director of the National Institute of Environmental Health Sciences and the National Toxicology Program, has decided to step away from his administrative roles at the institute. He plans to devote more time to his research as a principal investigator and chief of the NIEHS Laboratory of Structural Biology’s DNA repair and nucleic acid enzymology group—a decision made much easier, he said, because of “my complete confidence in the leadership of the incoming director, Dr. Linda Birnbaum.”

Wilson, who joined NIEHS in 1996 as deputy director, assumed his duties as acting head of NIEHS in August 2007, succeeding then director Dr. David Schwartz. In that role, he provided continuity for the institute through the transition until Birnbaum took office in January.

Wilson leaves with a legacy of supporting NIEHS programs in environmental genomics and environmental public health. During his tenure, he underscored NIEHS support for basic research in the institute’s Division of Intramural Research and strengthened ties with the NIEHS extramural community through a series of site visits to grantees throughout the United States. He increased the NIEHS commitment to its journal *Environmental Health Perspectives*, which recruited a new editor-in-chief during the transition, and reaffirmed institutional support for the environmental justice and community-based participatory research communities.

During the winter of 2007-2008, he and his team increased NIEHS participation in global environmental health and climate change partnerships at the national and international levels. In December 2007, he represented NIEHS leadership at the 20th anniversary of the Superfund Basic Research Program.

With his encouragement, the NIEHS Division of Extramural Research and Training initiated the innovative Partnership for Environmental Public Health Program in 2008. Wilson joined leaders of NTP in November 2008 to celebrate the program’s 30 years of accomplishments.

When Wilson became acting director, he set the tone for his tenure by telling NIEHS employees, “Just call me Sam,” and was known within the institute for his candor and accessibility. He was a vocal advocate for quality career development opportunities for fellows and junior investigators, as well as a proactive supporter of diversity and accommodation for employees with disabilities.—Eddy Ball 🗨

## NO BADGE

CONTINUED FROM PAGE 1

the requirements of HSPD-12 (Homeland Security Presidential Directive 12), which mandates suitability investigations of all employees, whether new hires or old hands. But as Taffet's staff has analyzed the data, using an improved version of the NIH Enterprise Directory (NED), it appeared that "many of the names are duplicates or triplicates." Further searches of the NED system and global email directory indicate that many of the people simply can't be located. "Chances are they are not here. They were once here and are now gone," he said.

Taffet says the number of noncompliant people is closer to 2,300. "We don't think that these people are ignoring us," he observed. "They just don't think of [compliance] as normal processing."

Neither does he believe that their failure to comply is some kind of organized revolt or expression of conscientious objection. "There is no sense of that. These people come from all

because the subject line seems so mundane; they open the emails and get frustrated by the homework involved, such as listing old addresses and past employers; or they fill out the documentation, but fail to hit the "submit" button at the end.

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*"Maybe the reason that so many people have not yet complied is that there is no April 15th for HSPD-12, like there is for the IRS."*

These folks were warned that, starting Jan. 1, those who don't complete the e-QIP (Electronic Questionnaires for Investigations Processing) forms will eventually have their badges "turned off" or deactivated.

"We don't actually take the badge away, we just deactivate it, or suspend it," said Taffet. A suspended card won't work to open perimeter gates or doors anywhere at NIH.

"We will go out three times to those who have not complied," explained Taffet. "The first email notice will give them 7 days to comply. The second notice will give them another 7 days. The third and final notice will give them 7 more days, and warn that the badge will be deactivated. I hope we never get to that stage. I hope people realize the importance of completing that form."

Taffet said DPSAC will try to use a catchier subject line in the warning emails, to draw more attention. "We expect a pretty good response," he said. "If necessary, we will go to the executive officers with a list of people, and ask them to persuade the employees to comply."

Most NIH employees, around 73 percent of the workforce, have the lowest level of security review, going back only 5 years and asking 14 questions, said Taffet. These are "non-sensitive" positions.

Another 24 percent of employees fill out a "public trust" form—these are for positions that might conceivably be prone to influence or potential harm. The background check in this category extends back 7 years and includes a few more questions than the lowest level.

The highest level, or national security positions, is appropriate for only about 3 percent of the workforce, or about 1,000 people, Taffet said.

### Wait, There's More!

So, you complied with all the HSPD-12 rules, filled out your e-QIP, got your new badge and received written certification that, security-wise, you're cool. Good to go, right?

Not so fast. The cool people have one more bridge to cross before HSPD-12 reaches ultimate fulfillment—the issuance of new "smart" cards.

Everyone who works at NIH will be receiving new ID badges, starting this year, said Richie Taffet, acting director of the Division of Personnel Security and Access Control. That means new photos for everyone and sophisticated new cards that will be used not only for identity and physical access, but also for computer access.

"We just ordered the first batch of the new HSPD-12 smart cards," said Taffet, "and we're waiting for delivery. We want to test the first batch (of 2,500 cards) to be sure they work in Baltimore, Montana, North Carolina, Bldg. 10, etc. When we are sure that they work, I will place a very large order."

Taffet is directing batches of 100 of the new cards to all corners of NIH, to be sure they enable proper access. If they pass the test, he'll pull the trigger on 35,000 more.

"They will require that you have a new photo taken," he said, "but there will be no new background check."

over NIH, from Montana to Baltimore to North Carolina to Bethesda. And they come from all employment categories and grade levels, from FTEs to contractors, fellows, Title 42, etc. It's a snapshot of NIH, really."

Taffet suspects three causes of noncompliance: the workers don't regard the email notices as serious, and delete them as bureaucratic trifles



The questionnaire is more expansive and looks 10 years back into an individual's past.

Taffet insists "people should not really worry about filling out the e-QIP forms. It's highly unlikely that it would affect your job if you've been here awhile." In the event that a background check involves an issue from someone's past, there is an adjudicative process in place for explaining past indiscretions, he said, and an appeals process on top of that if an individual feels his or her case was improperly adjudicated.

Taffet has a team of 30 specialists dedicated to the task of adjudication, which involves "taking a look at the whole person. We all realize that history changes things. So you might have burnt your draft card back in the 1960s—how relevant is that today to a scientist who has done decades of distinguished work in the intervening years? We also look at the relevance of an offense to a person's job."

If someone is denied a position, "you can appeal," said Taffet. "You will be told why you were denied and will be given a chance to refute the evidence. OPM mandates the appeals process."

Taffet emphasizes that suitability investigations of federal hires has been a fact of life for decades, since President Eisenhower issued an executive order on the subject back in 1953. Further, anyone who fills out a federal job application sees the clear message on all announcements: "This position is subject to a background investigation."

"It shouldn't come as a surprise to people," he said. "For the past 56 years, it's been the rule of the land."

He said DPSAC has computers on hand for people who lack access to PCs to fill out the electronic forms; his staff will walk customers through the process.

Taffet concluded, "Maybe the reason that so many people have not yet complied is that there is no April 15th for HSPD-12, like there is for the IRS. Everyone knows that their taxes are due on Apr. 15, but we don't have something similar. I think that people [who have not yet complied] just forgot about it somehow. They didn't see it as important. But it's a condition of employment. No one that I know of has ever said, 'No, I'm not complying.' I think it's just human nature." 🗨️

## NINR Celebrates First Graduates of Graduate Partnerships Program

By Ray Bingham

NINR recently celebrated the first two graduates from its Graduate Partnerships Program (GPP) in Biobehavioral Research, Drs. Anne Letocha Ersig and Katherine Balk Meilleur. The program allows outstanding nursing graduate students from universities across the country to conduct part of their doctoral research on the NIH campus.

Ersig, a board-certified pediatric nurse practitioner, obtained her doctoral degree from the University of Iowa. Before starting her research career, she worked as a clinician in pediatric intensive care. In 2001, she completed the NINR Summer Genetics Institute, a 2-month doctoral-level program in genetics research, practice and policy. Afterward, she became a research coordinator at NICHD. "Within about a year, I realized that I wanted to be conducting my own independent research," she said.

What she remembered most about the GPP was "coming to campus and finding out about all of the opportunities available. For example, I was able to take courses in writing, teaching and making scientific presentations."

While at NIH, Ersig's research focused on families at risk for or affected by hereditary health conditions. Upon graduation, she accepted a position as a postdoctoral fellow at the University of Iowa. "The NINR GPP opened many professional and educational doors for me."

Meilleur started her career in a genetics lab after receiving a B.S. in biology. Later, she entered nursing and worked in neonatal intensive care while pursuing her master's degree as a pediatric nurse practitioner. Like Ersig, she also participated in the SGI, which helped spur her interest in research. "I wanted to combine genetics with nursing because I saw the future importance and impact of this combination," said Meilleur. She completed her doctoral studies through Johns Hopkins University.

Her research project focused on searching for novel genes for neurogenetic diseases and describing patients' knowledge and attitudes about genetic testing in Mali, Africa. "My most memorable experience was my time in Africa, seeing patients in their homes and collecting data with an amazing team of genetics counselors, nurses and physicians from the U.S., Mali and France," she said. "The GPP gave me an opportunity to work with expert researchers at NIH who believed in me and in the importance of international health disparities."

Meilleur is currently working as a research fellow with the new Center for Research on Genomics and Global Health at NHGRI.

Following in these footsteps, nurse Taura Barr, a GPP scholar from the University of Pittsburgh, will soon be completing her doctoral research on DNA damage sensor/signaling proteins and outcomes following traumatic brain injury. She expects to defend her dissertation this spring. In addition, there are currently seven other scholars in the program.

NINR director Dr. Patricia Grady said, "These young scientists exemplify how the NIH Intramural Program is preparing the scientists of the future." 🗨️



At top, Dr. Anne Ersig (r), receives her GPP certificate from NINR deputy director Dr. Mary Kerr.

Dr. Katy Meilleur (above, r) with Dr. Charles Rotimi, director of the Center for Research on Genomics and Global Health at NHGRI



*Chris Booher successfully manages a demanding workload despite being blind.*

## AFP Intern Booher, a Positive Presence at NIMH

By Marsha Love and Candace Leu

You may have seen Chris Booher in the elevator or in the hallways of the Neuroscience Center (6001 Executive Blvd.). When you walk into the NIMH grants management office, you are likely to meet him. He is warm, friendly and helpful. Booher is part of the Administrative Fellows Program (AFP), a 2-year internship using and enhancing skills in analysis, leadership and management to support the NIH administrative community. Currently, there are approximately 100 people participating in this program.

Grants management, one track AFP offers, is challenging and very detail-oriented. As the office responsible for awarding and administering all NIMH grants, it is the foundation of the institute. What makes Booher unique is that he is successfully managing a demanding workload and he is blind.

He has retinitis pigmentosa (RP), a genetic degenerative disease that affects the rods and cones of the eye, causing a loss of night and peripheral vision. In advanced stages, it can cause a loss of central vision leading to total blindness. Diagnosed in middle school, Booher was not affected by RP until his undergraduate years in college. During graduate school, his RP had progressed to the point that it was affecting his studies and other aspects of his life. Needing advice from others who had also lost their vision, Booher joined the National Federation of the Blind (NFB).

"Before this," he said, "I didn't know anyone who was blind."

He became active in NFB. He learned how to travel independently with a long white cane, read and write Braille, use specialized computer software and perform everyday activities such as cooking and cleaning using techniques he learned at an NFB training site in Louisiana. Still involved in NFB activities, Booher participates in community outreach efforts to educate the public about blindness and speaks at NFB student seminars encouraging blind teens to be informed and self-assured consumers. He feels that the most valuable element of his NFB experience has been his increased sense of confidence. It was this newfound confidence that led him to pursue his M.B.A. and eventually to find a position at NIH.

While Booher has some residual vision, he employs job skills learned at NFB to do his job. In addition to screen-reader software, which recites the information shown on his computer, he also uses optical character recognition software that reads aloud typed documents or PDFs that have been scanned into the computer. These programs give him the ability to perceive every detail of information on a grant application, even alerting him when there is missing information in required fields or when an application is complete.

When asked what his life has been like at NIH, Booher said, "It has been a wonderful experience. The people are great and they're open to working with someone who's blind."

This openness and commitment to diversity were key factors in Booher's choosing the grants management track. The staff's willingness to accept him and to give him a chance made a positive impression on him. And he continues to be a positive presence at NIMH. 🗣️

## feedback

Curious about some aspect of working at NIH? You can ask questions anonymously at [www.nih.gov/nihrecord/index.htm](http://www.nih.gov/nihrecord/index.htm) (click on the Feedback icon) and we'll try to provide answers.

**Feedback:** Here's a story idea: What was the reasoning behind the recent decision (just announced to the NIH parents listserv [Jan. 13]) to eliminate the NIH Childcare Resource and Referral Service? We are told that this decision was due to budget cutbacks, and I'm sure everyone at NIH understands that budget cutbacks are necessary. However, it's hard to believe that the cost of this program was so great that cutting it could help the NIH Worklife Center's budget very much. The Childcare Resource and Referral Service has been an invaluable resource for NIH parents over the years; anyone with children knows that finding good childcare is a huge source of stress. I also find it disturbing that the decision to cut this program was made without any feedback from the community of NIH parents. The decision was not announced until the program had already been terminated. If NIH truly cares about being a family-friendly environment, the loss of this service is a huge setback.

**Response from NIH's Office of Research Services:** The Child Care Referral Service will continue through fiscal year 2009. The service was previously managed by the Office of Human Resources, but will now be part of the ORS Division of Amenities and Transportation Services. Although we cannot guarantee additional funding will be available past FY 2009, we will make every effort to secure funding through the budget process to continue this activity in FY 2010 and beyond. We are very cognizant of the importance of the referral service to the many employees with children on the waiting list.



# milestones

## CSR Names New IRG Chiefs

The Center for Scientific Review recently named two new integrated review group (IRG) chiefs. Dr. Cathleen Cooper is new chief of the oncology 1 basic translational (OBT) IRG. Dr. Ross Shonat will lead the newly formed interdisciplinary, molecular sciences and training IRG.

“Dr. Cooper has demonstrated a quiet but very effective leadership in advancing many initiatives for CSR, making us very proud to have her as head of this new IRG,” said CSR director Dr. Toni Scarpa.

She has been the scientific review officer (SRO) for CSR’s transplantation, tolerance and tumor immunology IRG. Cooper has also been a referral officer in CSR’s Division of Receipt and Referral and a member of the SRO council and SRO training committee.

She has a Ph.D. in pathology from the University of Southern California and did postdoctoral training in molecular immunology at Columbia University. She was an assistant professor in the department of cell biology and the cancer center, where she led a research team studying the molecular regulation of early events in hematopoietic development. NIH, the American Cancer Society and private foundations funded her work.

OBT, created in an effort to restructure how CSR reviews grants, is under the Division of Basic and Integrative Biological Sciences. It considers applications involving basic and translational investigations that encompass cancer initiation, promotion, progression and metastasis.

Shonat has been the SRO in CSR’s bioengineering sciences and technology IRG. “We are very impressed with Dr. Shonat’s imagination, thinking outside of the box and the originality of his



*New IRG chiefs Dr. Cathleen Cooper and Dr. Ross Shonat*

contributions to the review process,” said Scarpa. “We look forward to seeing Dr. Shonat excel in this new role and continue to push the envelope to enhance NIH peer review.”

Shonat earned his Ph.D. in bioengineering from the University of Pennsylvania. His research focused on optical imaging of blood flow and oxygen dynamics in the eye. He completed post-doctoral training in microcirculatory physiology at the University of Arizona and conducted additional research involving neurophysiology and molecular biology using magnetic resonance imaging at Carnegie Mellon University.

Then, as a faculty member at Worcester Polytechnic Institute, he taught physiology and bioengineering to undergraduate and graduate students. His research program centered on oxygen tension imaging in the diabetic eye.

Shonat’s IRG, which is in the Division of Basic and Integrative Biological Sciences, reviews cross-cutting molecular science applications that focus on either application of emerging technologies to molecular problems or on training in the molecular sciences.

## Credit Union Names Callis New President, CEO

The NIH Federal Credit Union has named Juli Anne Callis as its new president and chief executive officer. The appointment is effective Mar. 16. Callis follows Lindsay A. Alexander, who retired in December after nearly 20 years with NIHFCU in the same position.

Callis joins NIHFCU with over 20 years of credit union leadership experience. Most recently, and for the past 10 years, she served as executive vice president and chief operating officer for Keypoint Credit Union in Santa Clara, Calif., and president of Keypoint Financial Services, which offers mortgages. Prior to these appointments, Callis was vice president of emerging technology and business development for the credit union. She launched her credit union career at Langley Federal Credit Union in Hampton, Va., where she served as vice president of marketing and public relations from 1988 to 1995. Callis holds a master’s degree from the University of San Francisco and a bachelor of science degree from East Carolina University.

Steven J. Berkowitz, chairman of the NIH FCU board, said, “We are thrilled with the selection of Juli Anne as our next CEO. Her experience, technological expertise and personal drive to excel will help us continue to provide exceptional financial products and expand convenient services for all current and future NIH members and beyond.”



*Juli Anne Callis is the NIHFCU’s new president and chief executive officer.*



*Dr. Elizabeth Gillanders is now chief of the Host Susceptibility Factors Branch in NCI's Division of Cancer Control and Population Sciences.*

## Gillanders Named Branch Chief at NCI

Dr. Elizabeth Gillanders has been named chief of the Host Susceptibility Factors Branch in the Division of Cancer Control and Population Sciences, NCI. The branch focuses on personal susceptibility factors in human cancer etiology such as genetic, epigenetic, immunological and hormonal biological pathways.

Gillanders has contributed to the development of several post genome-wide association study (GWAS) funding opportunities announced by the Genes, Environment and Health Initiative. She has participated in NCI and NIH committees developing data access policies for GWAS. She also recently organized a new consortium for breast cancer epidemiology studies among women of African ancestry.

Previously, Gillanders worked at the National Human Genome Research Institute, where she headed its intramural genetic epidemiology unit within the Cancer Genetics Branch. Her research focused primarily on genetic epidemiology of cancer susceptibility, with an emphasis on melanoma, prostate cancer and breast cancer.

She holds an M.S. in molecular genetics from Johns Hopkins University and a Ph.D. in genetic epidemiology from Hopkins' Bloomberg School of Public Health. She is an adjunct assistant professor at the Bloomberg School, where she teaches an introductory human genetics course.



*Anna Wilder bids farewell to NIH.*

## NCI's Wilder Retires After 30 Years at NIH

The Laboratory of Pathology in NCI's Center for Cancer Research recently bade a fond farewell to Anna Wilder, one of its most dedicated employees. After over three decades of continuous federal service, she retired from her position as a cytotechnologist in the cytopathology section on Jan. 2.

Wilder was born and raised in "the heart of

bluegrass," Danville, Ky., and graduated from the University of Louisville in 1975. She began her federal career at the National Naval Medical Center in 1978. In 1980, she joined the Laboratory of Pathology. The lab conducts diagnostic anatomic pathology for patients undergoing clinical trials at NCI and in the Clinical Center, for all patients being considered for entry into clinical trials and for other studies of disease pathology.

Wilder was a member of the American Society of Clinical Pathologists, the Metropolitan Washington Association of Cytology and the American Society of Cytotechnology. In addition, she was a co-author on numerous publications in her field.

"I have been fortunate to have worked with the best and brightest in their field," Wilder said. "Being a part of an academic environment has been truly rewarding. I have literally learned something new every day during my career at NIH and have interacted with the clinical services of essentially all of the institutes. It is also pretty incredible that I have spent the last 28 years of my career in the same building and room!"

The Laboratory of Pathology and other NIH staff members and friends paid tribute to Wilder at a retirement party. Dr. Armando Filie, acting chief of cytopathology, was among the many speakers at the event. "Anna's tenure was marked by tireless dedication to her work. She continuously provided high quality cytology services to NIH patients and helped train numerous anatomic pathology residents and cytopathology fellows," he said.

After more than three decades of examining microscopic slides and the various colors, shapes and patterns associated with cells, Wilder now will be doing something not altogether different. She plans to get serious about her art and begin painting canvases again. Other hobbies include dance, music and downhill skiing. She may even take up bird watching.—Patricia Fetsch



## Biophysicist Tasaki Leaves Extraordinary Scientific Legacy

Revered biophysicist Dr. Ichiji Tasaki died Jan. 4 at age 98. Retired in name only, he was still active as an NIH scientist at the time of his death, putting in 7 days a week as scientist emeritus. His reserved manner and modesty belied his extraordinary achievements.

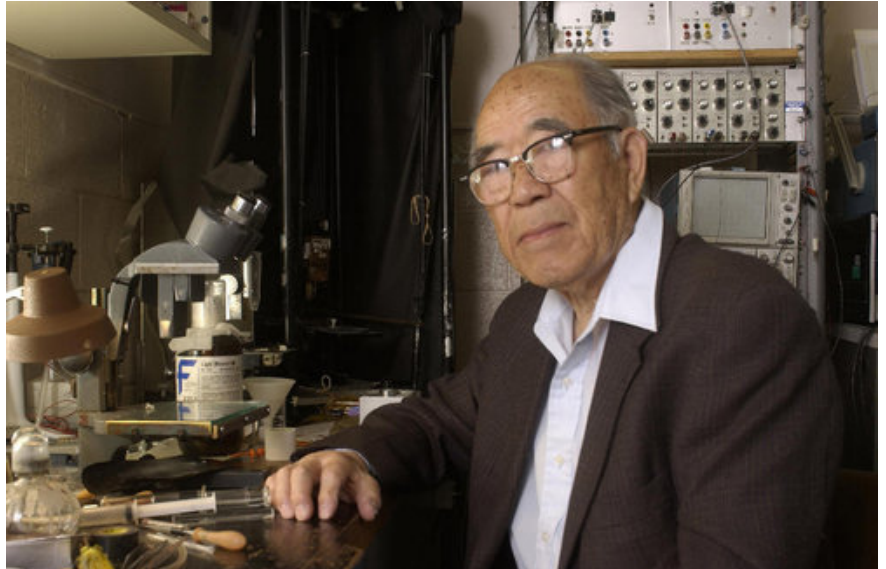
Almost 70 years earlier, the then 29-year-old scientist published the first in a series of papers establishing how nerve impulses (action potentials) jump from gap to gap in the myelin sheath that surrounds some axons. Tasaki's discovery revealed the insulating function of myelin and explained the speed with which nerve impulses can travel along myelinated nerves. His findings are part of the basic knowledge of the nervous system that every student learns.

That work was the first in a legacy of studies that helped establish current understanding of the chemistry and physical processes underlying nerve excitability and mechanisms involved in hearing and vision. According to his colleagues, Tasaki was exceptional in his ability to apply a deep knowledge of physics and mathematics, mostly self-taught, to understand the behavior of biological systems. In addition, he brought an extraordinary level of devotion to science, typically working 7 days a week year round. His work was his greatest passion, says Dr. Peter Basser, chief of NICHD's section on tissue biophysics and biomimetics, where Tasaki had been working for the past decade. Tasaki was "a scientist's scientist, never afraid to question current dogma, always digging deeper to discover the truth."

Tasaki received his M.D. degree from Keio University in Japan. He was working in Japan when he reported his initial findings on conduction of electrical impulses in vertebrate nerves, first in an article in the *American Journal of Physiology* in 1939. As a result of World War II, subsequent manuscripts, written in German, were sent for publication to Frankfurt, first by Siberian railroad and then by German U-boat.

He subsequently worked as a visiting scientist at research institutions in Switzerland and England, then came to the United States in 1951, where he conducted research at Washington University in St. Louis. His work there clarified key details of how the components of the inner ear function to transduce sound into neural impulses the brain can interpret.

Tasaki joined NIH in 1953 as a visiting scientist in the then National Institute of Neurological Diseases and Blindness, moving to NIMH in 1961. From 1966 to 1984, he was chief of NIMH's Labo-




ratory of Neurobiology and subsequently a senior research scientist until he "retired" in 2008. Since 1998, he had been working on detail to NICHD. At the age of 97, he was believed to have been the oldest active duty scientist in the history of NIH. After retirement he was quickly named scientist emeritus and continued his scientific work until his death.

During the 1960s, Tasaki's findings changed our understanding of the ion chemistry involved in impulse transmission by nerves. He pioneered the use of dyes that fluoresce with electrical stimulation to observe physical changes in nerve membranes as they transmit impulses. He measured the heat generated and absorbed by electrically stimulated nerves, including the heat given off by the retina in response to absorbed light.

For nearly 70 years, Tasaki's wife, Nobuko, worked side-by-side with him as his lab assistant and partner. Together, they pioneered a method to control the internal and extracellular chemical milieu in axons. Mrs. Tasaki died in 2003 while leaving the lab.

In acknowledging Tasaki's appointment as scientist emeritus, NIMH director Dr. Thomas Insel and scientific director Dr. Richard Nakamura wrote, "Your list of achievements is so great that most of us would consider any one of your discoveries a career-making event." In a floor statement in the U.S. House of Representatives last September, Maryland Congressman Chris Van Hollen recognized Tasaki's "countless contributions to scientific understanding."

In a reflection of how Tasaki was regarded in the lab, Basser addressed him as *sensei*: a Japanese term reserved for a master, teacher and guide. 

*Biophysicist Dr. Ichiji Tasaki was still active as an NIH scientist at the time of his death, putting in 7 days a week as scientist emeritus. He died Jan. 4 at age 98.*

### Astrocytes Usher Us to Lalaland

Brain cells called astrocytes help cause the urge to sleep that comes with prolonged wakefulness, according to a study in mice, funded by NINDS, NIMH and NIA. The cells release adenosine, a chemical known to have sleep-



*New research could lead to better drugs for inducing sleep when it is needed, and for staving off sleep when it is dangerous.*

inducing effects that are inhibited by caffeine. “Millions of Americans suffer from disorders that prevent a full night’s sleep, and others—from pilots to combat soldiers—have jobs where sleepiness is a hazard,” says Dr. Merrill Mitler of NINDS. “This research could lead to better drugs for inducing sleep when it is needed, and for staving off sleep when it is dangerous.” The study appeared Jan. 29 in

*Neuron*. Although the exact purpose of sleep is unknown, everyone seems to need it. Some research suggests sleep strengthens memories by adjusting the connections between neurons. As the waking hours tick by, all animals experience an increasing urge to sleep, known as sleep pressure. If sleep is delayed, a deep, long sleep usually follows as the body’s means of compensating. Prior studies pointed to adenosine as a trigger for sleep pressure. The chemical accumulates in the brain during waking hours, eventually helping to stimulate the unique patterns of brain activity that occur during sleep. This study is the first time a non-neuronal cell within the brain has been shown to clearly influence behavior.

### Huge Burden of Diabetes Revealed in New Data

Nearly 13 percent of U.S. adults age 20 and older have diabetes, but 40 percent of them have not been diagnosed, according to NIH and CDC epidemiologists, whose study includes newly available data from an oral glucose tolerance test (OGTT). Diabetes is especially common in the elderly: nearly one-third of those age 65 and older have the disease. An additional 30 percent of adults have pre-diabetes—elevated blood sugar not yet in the diabetic range. Researchers reported these findings in the February issue

of *Diabetes Care*. The study compared results of two national surveys that included a fasting blood glucose (FBG) test and 2-hour glucose reading from an OGTT. The OGTT gives more information about blood glucose abnormalities than the FBG test, which measures blood glucose after an overnight fast. The FBG test is easier and less costly than the OGTT, but the 2-hour test is more sensitive in identifying diabetes and pre-diabetes, especially in older people.

### Arthritis Drug in Trial Against Diabetes

Researchers in 20 medical centers across the country are enrolling adults with type 2 diabetes who have poorly controlled blood glucose to participate in a clinical study. Funded by NIDDK, the study is investigating whether salsalate—an anti-inflammatory drug used for years to manage arthritis pain—can reduce blood glucose levels in people with type 2 diabetes. If successful, the trial could lead to an effective, inexpensive way to treat the most common form of diabetes.

### Ozone Wheezing: New Cause, Potential Treatments ID’d

Researchers at NIEHS and Duke University have discovered a cause of airway irritation and wheezing after exposure to ozone, a common urban air pollutant. Using an animal model, scientists found several ways to stop the airways from narrowing. These findings point to potential new targets for drugs that may eventually help physicians better treat emergency room patients suffering from wheezing, coughing and shortness of breath. Ozone is formed in the inner atmosphere, in the presence of sunlight, from pollutants emitted from vehicles and other sources. Exposure occurs when people inhale air containing ozone. About 4,500 hospital admissions and 900,000 school absences each year are attributed to ozone exposure, especially on high-ozone alert days. “We found that it is not the ozone itself that causes the body to wheeze, but the way the lungs respond to ozone,” said Dr. Stavros Garantziotis of NIEHS, lead author of the paper published online in the *Journal of Biological Chemistry*. Animals exposed to ozone produce and release high amounts of a sugar known as hyaluronan, which researchers found to be directly responsible for causing the airways to narrow and become irritated. The sugar may also contribute to asthma symptoms in humans. The researchers found several proteins that can mediate the hyaluronan effect and can be used as treatment targets.—compiled by Carla Garnett





The phone numbers for more information about the studies below are 1-866-444-2214 (TTY 1-866-411-1010) unless otherwise noted.

### Pelvic Pain

NIH is conducting a research study with women ages 18-50 with a history of chronic pelvic pain. There is no cost for study-related tests or medicines. Refer to study 04-CH-0056.

### Twins Study

NIH is seeking same-sex fraternal twins 5-20 years old to participate in a study of children's brain development. Compensation is provided. Refer to study 89-M-0006.

### Adolescent Girls Overeating

Parents, is your daughter's eating out of control? Consider having her participate in an NIH study on teen weight prevention. This study is for girls ages 12-17 who are above average weight and report loss of control eating. This study will test how effective group programs are in the prevention of excess weight gain. Participants will be compensated. Refer to study 08-CH-0139.

### USUHS Study Needs African Americans

The Uniformed Services University of the Health Sciences is conducting a research study for African Americans, ages 18-60, that examines stress hormones in response to viewing a racially charged film. The intent is to understand how key hormones may contribute to a person's becoming overweight. Subjects may be compensated \$75. Study also involves blood and saliva collection and a questionnaire. It requires at least one visit to the lab and takes about 4 hours. If interested, contact the Human Performance Laboratory at (301) 295-1371 or [humanperformancelab@usuhs.mil](mailto:humanperformancelab@usuhs.mil).

### Decked Out in Red, To Support Heart Health

*These ladies supported American Heart Month by wearing red to work on Feb. 6, to bring attention to the ravages of heart disease in women. All members of NICHD's Management Service Branch, they are (standing, from l) Marsha Gorham, Marlene Taulton, Tracy Springer, Jacqueline Lancaster and Angela Green. Seated is Linda Stephens.*



*CSR director Dr. Toni Scarpa (second from l) recently presented the Explorer Award to (from l) Dr. Geoffrey Schofield, Dr. Xiang-Ning Li and Dr. Dan Gerandasy.*

### CSR Honors Pioneering, Innovative Staffers

*By Esmeralda Barnes*

The Center for Scientific Review recently presented its first "Architect Award" recognizing a staffer who not only proposed innovative ideas to advance the mission of CSR and NIH, but also helped bring them to life.

The honoree is Dr. Don Schneider, who made major contributions as "an architect to the NIH and the extramural scientific community in enhancing peer review," said CSR director Dr. Toni Scarpa. Schneider is director of the Division of Basic and Integrative Biological Sciences and has been on the front lines of ongoing efforts to revamp peer review.

The Architect Award builds on the principles of CSR's Explorer Award, which

acknowledges staffers who generate and present innovative ideas or whose ideas result in great improvements in the work environment.

This year, there were three CSR Explorer Award honorees: Dr. Geoffrey Schofield, scientific review officer for the biophysics of neural systems study section, conceptualized the self-contained Internet assisted review (IAR) for application scoring and ranking. IAR makes it convenient and efficient for reviewers to access necessary forms and documents during review meetings via a secure local wireless network, without the issues and expense associated with obtaining Internet access for all reviewers in the room. Dr. Xiang-Ning Li developed the meeting activity management toolkit, which helps SROs and others track meeting activities and information. He is scientific review officer for the surgery, biomedical imaging and bioengineering integrated review group. Dr. Dan Gerandasy, the SRO for two study sections in the Division of Neuroscience, Development and Aging, won the honor for introducing MOSS SharePoint to facilitate communication and collaboration between the Office of the Director, SROs, program officers, extramural support staff, reviewers and external committees and working groups.



*Architect Award honoree Dr. Don Schneider (l) and Scarpa*



### A Story of 3 'Snags'

Three tulip poplar trees south of Bldg. 31A near Center Drive have been cut down. The trees, which died in 1998, spent the last decade as "snags," or habitat trees.

A snag is a standing trunk of a dead tree whose base structure is solid; yet "10 years of heartwood rot had begun to jeopardize that stability," says Lynn Mueller, Office of Research Facilities landscape architect, "as shown by the hollowed-out trunks and surrounding punky heartwood."

It was prudent to remove the snags before they fell. "It was also important to take them down before the spring nesting season," Mueller says.

Spring spells woodpeckers. When they spot a snag, they see a flashing sign that reads "Gas! Food! Lodging!"

"Having woodpeckers make their homes here helps control wood-boring beetles and other damaging insects in nearby healthy trees," says Mueller. "Without a healthy population of woodpeckers, our campus trees could be overcome with pests that would require chemical pesticides to control."

And when Woody moves on? Our new neighbors will be other insect-eating birds such as titmice, nuthatches and wrens.

Thanks, in large part, to the birds, ORF has not used insecticide spray, with one exception, since 1989. Meanwhile, the NIH Master Plan requires that any tree lost must be replaced, at a minimum, on a one-to-one basis.

"These three trees were [already] replaced nearby with native species of nursery-grown shade and understory trees during the early winter of 1998," says Mueller. Additional trees will be planted in the fall of 2009.—Belle Waring



#### Above:

*The medium-sized tree had approximately 93 countable growth rings, making it about 104 years old today.*

#### Right:

*Heartwood rot jeopardizes the stability of trees.*

#### Below:

*The tulip poplars, which died back in 1998, spent the last decade as "snags," or habitat trees.*



PHOTOS: BELLE WARING

